(AMENDED)

25. The apparatus of claim 23, wherein each of said STTs has associated with it control capability, said session controller providing control related assets to said STT in accordance with said control capability of said STT, information indicative of a level of control capability associated with each STT being stored in said data base.

REMARKS

In this Office Action, claims 10-29 are pending, of which claims 10-29 also stand rejected. By this amendment, the applicants have amended claims 10, 15, 17, 23, and 25. In view of the amendments and discussion below, the applicants submit that the claims are in proper form and all the claims now pending are in condition for allowance.

I.   Objections

The Examiner has objected to the specification for failing to provide proper antecedent basis for the claimed subject matter. In particular, the Examiner contends that the specification fails to recite the "first level of control capability and a second level of control capability" as recited in claim 25.

The applicants have amended claim 25, which recites:

"The apparatus of claim 23, wherein each of said STTs has associated with it control capability, said session controller providing control related assets to said STT in accordance with said control capability of said STT, information indicative of a level of control capability associated with each STT being stored in said data base."

Support for the limitations in amended claim 25 is found in the specification. In particular, the session

controller 145 includes a capability data base 145-CD that is used to store information defining the graphic and, optionally, <u>control capability of each type of subscriber equipment 106</u> utilized within the interactive information distribution system 100 of FIG. 1 (see specification, Page 6, lines 15-18, and Page 4, lines 2-5).

As such, the applicants submit that the specification provides proper support for the limitations of amended claim 25. Therefore, the applicants respectfully request that the objection be withdrawn.

II. Rejections

1. 35 USC § 112

a) Claims 15 and 16

The Examiner has rejected claims 15 and 16 under 35 USC § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. In particular, the Examiner contends claim 15 recites "comprises control information", which is indefinite because of the "control information" recited in parent claim 14. The applicants respectfully disagree.

In particular, the applicants have amended claim 15 to include additional elements to further define what the applicants consider inventive. Specifically, claim 15, as amended, recites:

> "The method of claim 14, wherein an initial navigation asset provided to a set top terminal comprises <u>associated</u> control information, said control information being indicative of related navigation assets within said asset data base having associated with them a capability level of said STT receiving said initial navigation asset." (emphasis added).

Claim 15, as amended, now specifies that the "initial navigation asset provided by the STT comprises associated control information, [which is] indicative of related navigation assets." The "associated control information" corresponds to the initial navigation asset of claim 15, where the "control information" in claim 14 is related to navigational assets in general.

As such, the applicants submit that claim 15 is not indefinite under 35 USC § 112 and is patentable thereunder. Furthermore, claim 16 depends from claim 15 and recites additional limitations thereof. As such and for the same reason, the applicants submit that claim 16 is not indefinite under 35 USC § 112 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

2. 35 USC 102

a) Claims 10-13

The Examiner has rejected claims 10-13 as being anticipated under 35 USC § 102 by Cohen et al. (US Patent No. 6,011,918, issued January 4, 2000, hereinafter "Cohen"). The Examiner contends that Cohen discloses all the elements in claims 10-13 for a method of adapting asset delivery within a heterogeneous information distribution system. The Applicants respectfully disagree.

The applicants have amended independent claim 10 to include additional limitations that the applicants consider inventive. In particular, amended claim 10 recites:

> "A method of adapting asset delivery within a heterogeneous video-on-demand distribution system, comprising the steps of:

> determining, for each set top terminal (STT) requesting a session for video content <u>in the video-on-demand distribution system</u>, a capability level of said STT and a capability level of the distribution network;
>
> <u>selecting</u>, from a plurality of available video content and assets <u>stored on service provider equipment</u>, video content and assets appropriate to said capability level of said STT; and
>
> <u>providing</u> said selected video content and assets <u>in response to STT communications</u> indicative of a need for said video content and assets." (emphasis added).

The applicants have amended claim 10 to include the limitation of a <u>video-on-demand distribution system</u>. Support for the applicants' additional limitation is found in the specification (Page 1, lines 14-15). The video-on-demand distribution system provides video content such as video movies, trailers, audio, and the like, as well as asset data such as control and navigation assets (e.g., bitmaps, graphic overlays, control scripts, and the like) to set top terminals having different capabilities (see specification, page 4, line 32 to page 5, line 19). That is, the set top terminals may vary in regard to bandwidth capabilities, control processing, graphics processing, and the like (i.e., heterogeneous set top terminals in the video-on-demand distribution system).

By contrast, Cohen fails to teach <u>a video-on-demand distribution system</u>. Rather, Cohen is limited to disclosing <u>partitioning program applications between client and server functions</u>, based upon weighted program classes and programmed methods associated with the classes (see Cohen, Col. 3, lines 11-28). By basing the partitioning on a target system computing topology, Cohen allows for the development of <u>distributed processing applications</u>, such as

client/server applications, which take into account the
heterogeneity of a computer network (see Cohen, Col. 3,
lines 32-36). As such, there is no teaching whatsoever of
"determining, for each set top terminal (STT) requesting a
session in the video-on-demand distribution system, a
capability level of the STT and a capability level of the
distribution network." Furthermore, the distributed
processing applications of Cohen are different from video
content. Video content, as defined by the applicants,
comprises movies, television programs, and other offerings
of a video-on-demand system (see specification, Page 4,
lines 32-34).

Moreover, there is no teaching by Cohen of
"selecting, from a plurality of available video content and
assets stored on service provider equipment, video content
and assets appropriate to said capability level of said
STT." More specifically, various tiers of video content
(e.g., high definition and low definition content) and
assets (e.g., high, medium, and low graphic assets) are
stored at the service provider equipment (see e.g.,
specification, Page 6, lines 25-34, and FIG. 1).

In fact, Cohen is completely silent with regard to the
service provider equipment. Applicants have defined the
service provider equipment as including, in part, an asset
storage module, a content storage module, a session
controller, and a transport processor (see specification,
Page 4, lines 20-22, and FIG. 1). The service provider
equipment provides selected video content and assets to the
STT (i.e., subscriber equipment) in response to a request
from a particular STT and according to the capabilities of
such requesting STT. Therefore, the Cohen reference is

completely silent with regard to video-on-demand and storing video content and assets at the service provider equipment.

In addition, Cohen teaches that the application may be distributed by distributing client objects to a client computer system, in response to a request for execution of the client application <u>and server objects to a server</u>. This distribution may be accomplished by receiving a request for the client application and a client capability set and selecting a client application based on the received client capability set. The client application corresponding to the client capability set may then be provided to the client computer system <u>and a corresponding server application provided to the server computer system</u> (see Cohen, Col. 4, lines 26-38). Thus, the application is provided to both the client computer <u>and the server</u>.

This is completely different from the applicants' invention. Specifically, there is <u>no corresponding server application provided to the server upon a request by the STT</u>. Rather, the service provider equipment of the video-on-demand distribution system <u>stores</u> the video content and assets, and then provides selected video content and assets to a set top terminal requesting video content and assets, where the video content and assets selected and provided correspond to the capabilities of the requesting STT.

As such, the applicants submit that independent claim 10 is not anticipated under 35 USC § 102 and is patentable thereunder. Furthermore, claims 11-13 depend from claim 10 and recite additional features thereof, which the applicants consider inventive. As such and for the same reason, the applicants submit that these dependent claims

are not anticipated under 35 USC § 102 and are patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

3. 35 USC 103

a) Claims 14 and 15

The Examiner has rejected claims 14 and 15 as being obvious under 35 USC § 103 over Cohen in view of Barraud (US Patent No. 6,088,051, issued July 11, 2000) and in further view of de Vos et al. (US Patent No. 6,167,044, issued December 26, 2000, hereinafter "de Vos"). The Examiner contends that Cohen discloses dicloses distributing asset application codes to a STT depending on the STT capabilities, however the Examiner concedes that Cohen fails to disclose that the assets comprise "navigation assets including video information, graphics information, and control information. The Examiner further contends that Barraud discloses providing navigational assets to a STT based on performance requirements or the capabilities of the STT, and de Vos teaches providing a menu from a navigational device to provide a user with service items, wherein the navigational menus comprises video information and control data in graphical form to facilitate a user selection. The Examiner then concludes it would have been obvious to provide navigational assets with video information, graphics information, and control information based on the capability of a STT since Cohen would have provided a client with an interactive means of navigating through the available applications, while enabling fast choice selection. The applicants respectfully disagree.

The combination of prior art fails to teach or suggest the applicants claimed invention. In particular, claim 14 depends from independent claim 10. Independent claim 10 recites:

"A method of adapting asset delivery within <u>a heterogeneous video-on-demand distribution system</u>, comprising the steps of:
    determining, for each set top terminal (STT) requesting a session for video content <u>in the video-on-demand distribution system</u>, a capability level of said STT and a capability level of the distribution network;
    <u>selecting</u>, from a plurality of available video content and assets <u>stored on service provider equipment</u>, video content and assets appropriate to said capability level of said STT; and
    <u>providing</u> said selected video content and assets <u>in response to STT communications</u> indicative of a need for said video content and assets." (emphasis added).

Furthermore, claim 14 recites the limitations of:

"The method of claim 10, wherein said assets comprise navigation assets including video information, graphics information and control information."

Cohen fails to teach or suggest the applicants' claimed invention. Specifically, Cohen is limited to disclosing <u>partitioning program applications between client and server functions</u>, based upon weighted program classes and programmed methods associated with the classes (see Cohen, Col. 3, lines 11-28). By basing the partitioning on a target system computing topology, Cohen allows for the development of <u>distributed processing applications</u>, such as client/server applications, which take into account the heterogeneity of a computer network (see Cohen, Col. 3, lines 32-36). As such, there is no teaching or suggestion whatsoever of "determining, for each set top terminal (STT) requesting a session <u>in the video-on-demand distribution</u>

system, a capability level of the STT and a capability level of the distribution network." Furthermore, the distributed processing applications of Cohen are different from video content. Video content, as defined by the applicants, comprises movies, television programs, and other offerings of a video-on-demand system (see specification, Page 4, lines 32-34).

The applicants' invention does not partition content or assets in a client/server relationship for distribution between the client and server nodes as taught by Cohen. Rather, the applicants' invention streams video content and assets stored at the service provider equipment of the video-on-demand distribution system to set top terminals requesting such video content and assets, based on the capabilities of each STT.

Furthermore, the prior art references of Barraud and de Vos fail to bridge the substantial gap as between the Cohen reference and the applicants' invention. In particular, Barraud discloses that <u>certain parameters</u> of a STT <u>are presumed for a particular STT</u>, when the "Identification Format" contains insufficient information. The minimum performance requirements for the assumed parameters are predetermined such as minimum screen driver in the form of teletext overlay, a four-button cursor, a select/unselect button, and the like (see Barraud, Col 3, lines 1-28).

Moreover, de Vos is limited to disclosing pre-downloaded navigation data from a navigation device. The navigation data from the navigation device includes a software program for displaying a menu of the available service items (see de Vos, Col. 5, lines 5-30).

As such, there is no teaching, suggestion, or motivation to combine Cohen with Barraud and de Voy. That is, Cohen is completely silent with regard to a video-on-demand distribution system. Furthermore, even if the cited references could somehow be combined, the combination is limited to teaching partitioning processing applications and navigation data with minimum performance requirements for various desktop computers, amongst various desktop computers and servers in a client/server network.

The combination of prior art is completely different from the applicants' claimed invention. Specifically, the applicants claim determining, for each set top terminal (STT) requesting a session for video content in the video-on-demand distribution system, a capability level of said STT and a capability level of the distribution network; selecting, from a plurality of available video content and assets stored at service provider equipment, video content and assets appropriate to said capability level of said STT; and providing said selected video content and assets in response to STT communications indicative of a need for said video content and assets. Thus, the applicants' invention provides video content and assets from service provider equipment in the video-on-demand distribution system, to heterogeneous set top terminals based on the capabilities of each STT and the distribution network.

As such, the applicants submit that claim 14 is not obvious under 35 USC § 103 and is patentable thereunder. Furthermore, claim 15 depends from claim 14 and recites additional features thereof, which the applicants consider inventive. As such and for the same reason, the applicants submit that this dependent claim is not obvious under 35

USC § 103 and is patentable thereunder. Therefore, the
applicants respectfully request that the rejection be
withdrawn.

b) Claim 16

The Examiner has rejected claim 16 as being obvious
under 35 USC § 102 over Cohen in view of Barraud, de Vos
and in further view of Eyzaguirre et al. (US Patent No.
6,191,786, issued February 20, 2001, hereinafter
"Eyzaguirre"). The Examiner contends that the combination
of Cohen, Barraud, and de Vos teaches the limitations as
described in regard to claim 14. However, the Examiner
concedes that Cohen, Barraud, and de Vos fails to teach the
navigation assets comprise applets including video
information, graphic information, and control information,
which are provided to a STT in response to user interaction
with control information at the STT indicative of a need
for stored applets. The Examiner further contends that
Eyzaguirre discloses that control elements include
navigational links such as JAVA applets. The Examiner
concludes that it would have been obvious to include
applets as navigational assets, which would provide control
information for customized linking to other related
applets. The applicants respectfully disagree.

Claim 16 depends from claim 15 and recites:

> "The method of claim 15 wherein said navigation
> assets comprise applets including said video
> information, graphic information and control
> information, said applets being provided to a set top
> terminal in response to user interaction with control
> information at said set top terminal indicative of a
> need for said stored applets."

As discussed above with regard to claim 14, the combination of Cohen, Barraud, and de Voy fail to teach the applicants invention. In particular, the combination is limited to partitioning processing applications and navigation data with minimum performance requirements for various desktop computers, amongst various desktop computers and servers in a client/server network.

As such, there is no teaching, suggestion, or motivation to combine Cohen with Barraud, de Voy and Eyzaguirre. That is, Cohen is completely silent with regard to <u>a video-on-demand distribution system</u>. Furthermore, even if the Eyzaguirre reference could be combined with the other prior art references, the combined references is limited to teaching partitioning processing applications and navigation data with minimum performance requirements for various desktop computers, amongst various desktop computers and servers in a client/server network, where the navigation data includes JAVA applets.

The combination of prior art is completely different from the applicants' claimed invention. Specifically, the applicants claim determining, for each set top terminal (STT) requesting a session for video content <u>in the video-on-demand distribution system</u>, a capability level of said STT and a capability level of the distribution network; <u>selecting</u>, from a plurality of available video content and assets stored at service provider equipment, <u>video content and assets appropriate to said capability level of said STT</u>; and <u>providing</u> said selected video content and assets <u>in response to STT communications indicative of a need for said video content and assets</u>. Thus, the applicants' invention provides video content and assets from service

provider equipment in the video-on-demand distribution system, to heterogeneous set top terminals based on the capabilities of each STT and the distribution network.

As such, since claim 16 depends indirectly from claim 14, the applicant submits that claim 16 is not obvious under 35 USC § 103 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

c) Claims 17, 18, and 20

The Examiner has rejected claims 17, 18, and 20 as being obvious over Cohen in view of Engstrom et al. (US Patent No. 6,044,408, issued march 28, 2000, hereinafter "Engstrom"). The applicants respectively disagree.

The applicants have amended claim 17 to recited additional limitations that the applicants deem inventive. In particular, amended claim 17 recites:

> "In an <u>interactive video-on-demand distribution system</u> including video-on-demand provider equipment coupled to subscriber equipment via a communications network, a method for adapting provided information to a set top terminal comprising the steps of:
> storing video-on-demand information at the provider equipment;
> <u>determining, during a video-on-demand session initiation, a capability level of said STT</u>, said determination being made by comparing STT configuration information to a data base of STT capability information; and
> providing, to said STT in response to an STT request for information, information adapted to said determined capability level of said STT;
> each of said set top terminals having a common video information processing architecture, one of a plurality of control architectures, and one of a plurality of graphics processing architectures."
> (emphasis added).

The combination of prior art fails to teach or suggest
"determining, during a video-on-demand session initiation,
a capability level of said STT, the determination being
made by comparing STT configuration information to a data
base of STT capability information." In particular, the
Cohen reference is limited partitioning program
applications between client and server functions, based
upon weighted program classes and programmed methods
associated with the classes (see Cohen, Col. 3, lines 11-
28). Cohen fails to teach or suggest a video-on-demand
session. In fact, Cohen is completely silent with regarding
a video-on-demand distribution system. Moreover, and as
the Examiner concedes, Cohen fails to disclose "each of the
set top terminals having a common video information
processing architecture, one of a plurality of control
architectures, and one of a plurality of graphics
processing architectures." The Examiner contends that
Engstrom teaches multimedia devices in computer systems
having hardware and software capabilities like display
controllers, plurality of control architectures, and a
plurality of graphics architectures.

As such, there is no teaching, suggestion, or
motivation to combine Cohen with Engstom. That is, Cohen is
completely silent with regard to a video-on-demand session
initiation in an interactive video-on-demand distribution
system. Furthermore, even if the two references could
somehow be combined, the resulting combination would
disclose a plurality of desktop computers having a common
video information processing architecture, one of a
plurality of control architectures, one of a plurality of
graphics processing architectures, and partitioning program

applications between client and server functions, based
upon weighted program classes and methods corresponding to
the classes. That is, the video information would be
distributed to the servers and set-top terminals. This is
completely different from the applicants' invention.
Specifically, there is no teaching or suggestion of
corresponding server application provided to the server
upon a request by the STT as taught by the combined prior
art. Rather, the provider equipment of the video-on-demand
distribution system stores the video content and assets,
and then provides selected video content and assets to a
set top terminal requesting video content and assets, where
the video content and assets selected and provided
correspond to the capabilities of the requesting STT.

As such, the applicants submit that claim 17 is not
obvious under 35 USC § 103 and is patentable thereunder.
Furthermore, claims 18 and 20 depend from claim 17 and
recite additional features thereof, which the applicants
consider inventive. As such and for the same reason, the
applicants submit that these dependent claims are not
obvious under 35 USC § 103 and are patentable thereunder.
Therefore, the applicants respectfully request that the
rejection be withdrawn.

d) Claim 19

The Examiner has rejected claim 19 as being obvious
over Cohen in view of Engstrom and further view of Barraud.
The applicants respectively disagree.

Claim 19 depends directly from claim 17 and recites
additional features thereof, which the applicants consider
inventive. The teachings of Cohen and Engstrom have been

discussed above with regard to the obvious rejection of claim 17 above. Barraud also fails to teach or suggest the applicants claimed invention as recited in claim 17. In particular, Barraud is limited to disclosing that certain parameters of a STT are presumed for a particular STT, when the "Identification Format" contains insufficient information. The minimum performance requirements for the assumed parameters are predetermined such as minimum screen driver in the form of teletext overlay, a four-button cursor, a select/unselect button, and the like (see Barraud, Col. 3, lines 1-28).

As such, there is no teaching, suggestion, or motivation to combine Cohen with Engstom and Barraud. That is, Cohen is completely silent with regard to <u>a video-on-demand session initiation in an interactive video-on-demand distribution system</u>. Furthermore, even if the two references could somehow be combined, the resulting combination would disclose a plurality of desktop computers having a common video information processing architecture, one of a plurality of control architectures, one of a plurality of graphics processing architectures, and <u>partitioning program applications between client and server functions</u>, based upon weighted program classes and methods corresponding to the classes, and presuming certain parameters for a particular STT when certain information is not provided.

This is completely different from the applicants' invention. Specifically, there is <u>no teaching or suggestion of a corresponding server application provided to the server upon a request by the STT</u> as taught by the combined prior art. Rather, in the applicants invention, the

provider equipment of the video-on-demand distribution system <u>stores</u> the video content and assets, and then provides selected video content and assets to a set top terminal requesting video content and assets, where the video content and assets selected and provided correspond to the capabilities of the requesting STT. Therefore, Barraud and Engstrom in combination with Cohen fails to teach or suggest the applicants' invention.

As such, since claim 19 depends directly from claim 17, the applicants submit that claim 19 is not obvious under 35 USC § 103 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

e) Claim 21

The Examiner has rejected claim 21 as being obvious over Cohen in view of Engstrom, Barraud, and further view of de Vos. The applicants respectively disagree.

Claim 21 depends indirectly from claim 17 and recites additional features thereof, which the applicants consider inventive. The teachings of the combination of Cohen, Engstrom and Barraud have been discussed above with regard to the obvious rejections of claims 17-20 above. Furthermore, de Vos is limited to disclosing pre-downloaded navigation data from a navigation device. The navigation data from the navigation device includes a software program for displaying a menu of the available service items (see de Vos, Col. 5, lines 5-30). Therefore, de Vos in combination with Cohen, Engstrom, and Barraud fails to teach or suggest the applicants' invention.

In particular, there is no teaching, suggestion, or motivation to combine Cohen with Engstom, Barraud, and de Vos. That is, Cohen is completely silent with regard to <u>a video-on-demand session initiation in an interactive video-on-demand distribution system</u>.

As such, since claim 21 depends indirectly from claim 17, the applicants submit that claim 21 is not obvious under 35 USC § 103 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

f) Claim 22

The Examiner has rejected claim 22 as being obvious over Cohen in view of Engstrom, Barraud, de Vos and Eyzaguirre. The applicant disagree.

Claim 22 depends indirectly from claim 17 and recites additional features thereof, which the applicants consider inventive. The teachings of the combination of Cohen, Engstrom, Barraud, and de Vos have been discussed above with regard to the obvious rejections of claims 17-21. Furthermore, Eyzaguirre is limited to disclosing control elements include navigatgional links, such as JAVA applets. Therefore, Eyzaguirre in combination with Cohen, Engstrom, Barraud, and de Vos fails to teach or suggest the applicants' invention.

In particular, there is no teaching, suggestion, or motivation to combine Cohen with Engstom, Barraud, de Vos, and Eyzaguirre. That is, Cohen is completely silent with regard to <u>a video-on-demand session initiation in an interactive video-on-demand distribution system</u>.

As such, since claim 21 depends indirectly from claim 17, the applicants submit that claim 21 is not obvious under 35 USC § 103 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

g) Claims 23-26

The Examiner has rejected claims 22-26 as being obvious over Utsumi (US Patent No. 6,195,677, issued February 27,2001) in view of Barraud and Engstrom. The applicants respectively disagree.

The applicants have amended claim 23 to include additional limitations thereof, which the applicants consider inventive. In particular, amended claim 23 recites:

> "In <u>a video-on-demand distribution system</u> including information provider equipment and information subscriber equipment, said information subscriber equipment comprising a plurality of set top terminals (STTs), each of said STTs providing at least a minimum level of graphics processing capability and a minimum level of image processing capability, information provider apparatus comprising:
> a session controller associated with the provider equipment, for interacting with each STT <u>in the video-on-demand distribution system</u> to responsively provide at least content streams, said provided content streams being adapted to a video processing capability of said STT requesting said provided content stream, said session controller storing, within a data base, information indicative of the video processing capability of said STT." (emphasis added).

The prior art reference Utsumi discloses a distributed network computing system having a security function for providing an applications service, such as an inventory control service, to various terminals such as PDAs,

personal computers, and portable PCs having different processing capabilities and connected to a plurality of communications networks including a public network, a wired LAN, and a wireless LAN (see Utsumi, Col. 1, lines 8-15). By contrast, Utsumi fails to teach or suggest a video-on-demand distribution system.

Engstrom discloses returning hardware capabilities (e.g., display controller, sound devices, or 3D graphics accelerator and software capabilities (e.g., emulation layer used to emulate functions) for a particular media device (see Engstrom, Abstract). Furthermore, Barraud discloses certain parameters of a STT are presumed for a particular STT, when the "Identification Format" contains insufficient information. The minimum performance requirements for the assumed parameters are predetermined such as minimum screen driver in the form of teletext overlay, a four-button cursor, a select/unselect button, and the like (see Barraud, Col. 3, lines 1-28).

As such, there is absolutely no suggestion or motivation to combine the teachings of Utsumi with Engstrom and Barraud. That is, Utsumi is completely silent with regard to a video-on-demand distribution system and a session controller associated with the provider equipment, for interacting with each STT in the video-on-demand distribution system to responsively provide at least content streams.

Furthermore, even if the prior art could somehow be combined, then the combination is limited to a distributed network computing system having a security function for providing an applications service to various terminals, hardware and software capabilities including 3D graphics,

and assumed minimum performance requirements of the desktop and portable PCs, and PDAs. This is completely different from the applicants' invention. In the applicants' invention, a session controller associated with the provider equipment, for interacting with each STT <u>in the</u> <u>video-on-demand distribution system</u> to responsively provide at least content streams, where the provided content streams are adapted to a video processing capability of the STT requesting the provided content stream, and the session controller stores within a data base, information indicative of the video processing capability of the STT.

As such, the applicants submit that claim 23 is not obvious under 35 USC § 103 and is patentable thereunder. Furthermore, claims 24-26 depend from claim 23 and recite additional features thereof, and which the applicants consider inventive. As such and for the same reason, the applicants submit that these dependent claims are not obvious under 35 USC § 103 and are patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

h) Claims 27 and 28

The Examiner has rejected claims 27 and 28 as being obvious over Utsumi in view of Barraud, Engstrom, and in further view of de Vos. The applicants respectively disagree.

Claims 27 and 28 depend indirectly from claim 23 and recite additional features thereof, which the applicants consider inventive. The teachings of the combination of Utsumi, Barraud and Engstrom have been discussed above with regard to the obvious rejection of claim 23. Furthermore,

de Vos is limited to disclosing pre-downloaded navigation data from a navigation device. The navigation data from the navigation device includes a software program for displaying a menu of the available service items (see de Vos, Col. 5, lines 5-30). Therefore, de Vos in combination with Utsumi, Barraud and Engstrom fails to teach or suggest the applicants' invention.

In particular, there is no teaching, suggestion, or motivation to combine Utsumi with Engstom, Barraud, and de Vos. That is, Utsumi is completely silent with regard to <u>a video-on-demand distribution system</u> and a session controller associated with the provider equipment, for interacting with each STT <u>in the video-on-demand distribution system</u> to responsively provide at least content streams.

As such, since claims 27 and 28 depend indirectly from claim 23, the applicants submit that claims 27 and 28 are not obvious under 35 USC § 103 and are patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

i) Claim 29

The Examiner has rejected claim 29 as being obvious over Utsumi in view of Barraud, Engstrom, de Vos, and in further view of Eyzaguirre. The applicants respectively disagree.

Claim 29 depends indirectly from claim 23 and recites additional features thereof, which the applicants consider inventive. The teachings of the combination of Utsumi, Barraud and Engstrom have been discussed above with regard to the obvious rejection of claims 23, 27, and 28 above.

Furthermore, Eyzaguirre is limited to disclosing control elements include navigatgional links, such as JAVA applets. Therefore, Eyzaguirre in combination with Utsumi, Barraud, Engstrom, and de Vos fails to teach or suggest the applicants' invention.

In particular, there is no teaching, suggestion, or motivation to combine Utsumi with Engstom, Barraud, de Vos and Eyzaguirre. That is, Utsumi is completely silent with regard to a video-on-demand distribution system and a session controller associated with the provider equipment, for interacting with each STT in the video-on-demand distribution system to responsively provide at least content streams.

As such, since claim 29 depends indirectly from claim 23, the applicants submit that claim 29 is not obvious under 35 USC § 103 and is patentable thereunder. Therefore, the applicants respectfully request that the rejection be withdrawn.

Conclusion

Thus, the Applicants submit that none of the claims, presently in the application, are indefinite, anticipated, or obvious under the respective provisions of 35 U.S.C. §112, 35 U.S.C. §102, and 35 U.S.C. §103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested

that the Examiner telephone <u>Mr. Eamon J. Wall</u> at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

_6/18/01_

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Brenda McKelly
Signature

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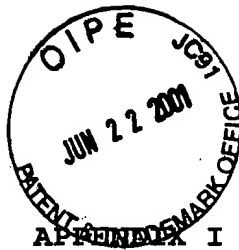
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APPENDIX I

MARKED-UP VERSION OF AMENDED SPECIFICATION PARAGRAPHS

Mark-up of paragraph beginning on Page 1, line 33, to page 4, line 14:

An interactive information distribution system provided by DIVA Systems Corporation of Redwood City, California is described in more detail in U.S. Patent No. 6,253,375, issued June 26, 2001 [Application Serial No. 08/984,710, filed on December 3, 1997] and incorporated herein by reference in its entirety. Users or subscribers to the DIVA system select information offerings using a "Navigator" functionality, which is described in more detail in U.S. Patent No. 6,208,335, issued March 27, 2001 [Application Serial No. 08/984,427, filed December 3, 1997] and incorporated herein by reference in its entirety. Briefly, the Navigator utilizes a combination of MPEG content (such as MPEG video content and related MPEG audio content) and Navigator asset data to provide viewers with a means of selecting and ordering services. Navigator assets include bitmaps and navigation control scripts. As the set top box user is "navigating," the set top box extracts the asset data from a transport stream including video content and asset data and uses that data to provide bitmap overlays on top of the MPEG content. The control data within the asset data is used to define the layout of the screen and to take actions based on viewer input.

Mark-up of paragraph beginning on Page 4, line 20, to line 31:

The service provider equipment 102 comprises an asset storage module 125, a content storage module 140, a session controller 145 and a transport processor 150. Briefly, the session controller 145, in response to a request from subscriber equipment 106, causes requested content to be retrieved from the content storage module 140 and provided to the transport processor 150. Additionally, any assets associated with the requested content are [cause to be] provided by the asset storage module 125 to the transport processor 150. The transport processor 150 combines or multiplexes the content and asset data to provide an output data stream for the requesting subscriber. The output data stream for the requesting subscriber is coupled to that subscriber via a forward application transport channel (FATC) within the distribution network 104.

Mark-up of paragraph beginning on Page 4, line 32, to Page 5, line 6:

The content storage module 140 is used to store content such as movies, television programs and other information offerings of the interactive information distribution system 100 of FIG. 1. While the content may be stored in several forms, such as unencoded, encoded and unpacketized, encoded and packetized, encrypted and the like, the preferred method is to store each content stream as an MPEG-2 transport stream including a plurality of NULL packets. [The preferred method for storing content streams within the content storage module 140 is described in more detail in US patent application serial no. _____,

filed on _____ and incorporated herein by
reference in its entirety.]

Mark-up of paragraph beginning on Page 8, line 18, to line
32:

The transport processor 150 contains a multiplexer or
combiner for multiplexing or combining the content
information stream CONTENT provided by content storage
module 140 and the asset information stream ASSETS provided
by asset storage module 125. Within the context of the
preferred embodiment, [described in U.S. Patent Application
Serial No._____,] the transport processor 150 detects
NULL packets within the content stream CONTENT, and
replaces some or all of those NULL packets with asset
packets from the asset stream ASSETS to form a combined
CONTENT and ASSET stream. The transport processor 150 also
contains a modulator for modulating the combined content
and asset stream onto one or more carrier frequencies for
transmission on the FATC, the so-called "in band" carrier
frequencies. The transport processor 150 also inserts
required system information (SI) and program specific
information (PSI) packets into the multiplexed stream.
These packets are generated based on the content in the
multiplex.

APPENDIX II

MARKED-UP VERSION OF AMENDED CLAIMS

(AMENDED)

10. A method of adapting asset delivery within a heterogeneous [information] <u>video-on-demand</u> distribution system, comprising the steps of:

determining, for each set top terminal (STT) requesting a session <u>for video content in the video-on-demand distribution system</u>, a capability level of said STT and a capability level of the distribution network;

selecting, from a plurality of available <u>video content and</u> assets <u>stored on service provider equipment</u>, [those] <u>video content and</u> assets appropriate to said capability level of said STT; and

providing said selected <u>video content and</u> assets in response to STT communications indicative of a need for said <u>video content and</u> assets.

(AMENDED)

15. The method of claim 14, wherein an initial navigation asset provided to a set top terminal comprises <u>associated</u> control information<u>, said control information being</u> indicative of related navigation assets within said asset data base having associated with them a capability level of said STT receiving said initial navigation asset.

(AMENDED)

17. In an interactive [information] <u>video-on-demand</u> distribution system including [information] <u>video-on-demand</u> provider equipment coupled to subscriber equipment via a communications network, a method for adapting provided information to a set top terminal comprising the steps of:

storing video-on-demand information at the provider equipment;

determining, during a video-on-demand session initiation, a capability level of said STT, said determination being made by comparing STT configuration information to a data base of STT capability information; and

providing, to said STT in response to an STT request for information, information adapted to said determined capability level of said STT;

each of said set top terminals having a common video information processing architecture, one of a plurality of control architectures, and one of a plurality of graphics processing architectures.

(AMENDED)

23. In [an information] a video-on-demand distribution system including information provider equipment and information subscriber equipment, said information subscriber equipment comprising a plurality of set top terminals (STTs), each of said STTs providing at least a minimum level of graphics processing capability and a minimum level of image processing capability, information provider apparatus comprising:

a session controller associated with the provider equipment, for interacting with each STT in the video-on-demand distribution system to responsively provide at least content streams, said provided content streams being adapted to a video processing capability of said STT requesting said provided content stream, said session controller storing, within a data base, information indicative of the video processing capability of said STT.

(AMENDED)

25. The apparatus of claim 23, wherein each of said STTs has associated with it [one of a first level of control capability and a second level of] control capability, said session controller providing control related assets to said STT in accordance with said control capability of said STT, information indicative of a level of control capability associated with each STT being stored in said data base.